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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/816,724 | 04/01/2004 | Arul Thangaraj | 15467US02 | 1029 |

7590 04/15/2008
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| EXAMINER |
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HOLDER, ANNER N

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| ART UNIT | PAPER NUMBER |
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2621

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04/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/816,724 | Applicant(s) THANGARAJ ET AL. | |
| | Examiner ANNER HOLDER | Art Unit 2621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-22 and 24-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see remarks - page 1 lines 3-9, filed 01/04/08, with respect to specification objection have been fully considered and are persuasive. The objection of the specification has been withdrawn.

2. Applicant's arguments filed 01/04/08 have been fully considered but they are not persuasive. As to Applicant's arguments regarding claims 1-19, Examiner respectfully disagrees. Malladi teaches the storages of a plurality of start codes in a start code table consisting of start codes for video, audio and packetized elementary streams. [fig. 4; col. 15 lines 14-60; col. 17 lines 21-55] Hoogenboom teaches the use of data words containing start codes. [fig. 3; col. 8 lines 39-65; Col. 2 Line 13; Fig. 4; Col. 15 Lines 34-39, 54-56] Both references teach the use of start codes in decoding of audio/video data in which start codes for the audio and start codes for the video are obtained and are placed in the data word to describe the data that is to follow the start codes. Thus, Malladi modified by Hoogenboom teaches the writing of a plurality of start codes to a particular one of the plurality of data words [Hoogenboom – Col. 2 Line 13; Fig. 4; Col. 15 Lines 34-39, 54-56 ; col. 8 lines 39-60; fig. 3; Malladi - col. 15 lines 14-66; col. 17 lines 21-55].

Specification

3. The disclosure is objected to because of the following informalities: the specification does not disclose the type of medium which is in compliance with MPEP that is used. Applicant states that the instructions "can be implemented as a set of executable instructions in the firmware" thus not clearly defining the medium or media used to store programs or instructions.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6-7, 10-15, 19-22, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malladi et al. (Malladi) US 5,815,206 in view of Hoogenboom US 5,566,089.

6. As to claim 1, Malladi teaches a method for decoding video data, [Abstract; Col. 1 Lines 24-28; Col. 2 Lines 61-63; Fig. 4] said method comprising: writing one or more start codes to a start code table; [Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 14-66; col. 17 lines 21-55] and writing presentation time information to the start code table; [Col. 15 Lines 34-39, 54-56] and wherein the start code table writing one or more start codes further comprises writing a plurality of start codes to a particular one of the plurality of data words. [col. 15 lines 14-66; col. 17 lines 21-55 – writes the start code to the data it represents.]

Hoogenboom teaches the use of data words and the use of start codes within the data word. [Hoogenboom – col. 8 lines 39-60; fig. 3; Col. 2 Line 13; Fig. 4; Col. 15 Lines 34-39, 54-56]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Hoogenboom's decoder with the decoder of Malladi to improve efficiency of coding and display of data.

7. As to claim 2, Malladi teaches presentation time information comprises a presentation time stamp. [Col. 15 Lines 34-39, 54-56]

8. As to claim 3, Malladi teaches writing decoding time information to the start code table. [Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 34-39, 45-46, 54-56; Hoogenboom - Col. 5 Lines 40-41; Col. 6 Line 21]

9. As to claim 4, Malladi (modified by Hoogenboom) teaches the decoding time information comprises a decoding time stamp. [Malladi - Col. 15 Lines 34-39, 45-46, 54-56; Hoogenboom - Col. 5 Lines 40-41; Col. 6 Line 21]

10. As to claim 6, Malladi (modified by Hoogenboom) teaches the plurality of start codes comprises a slice start code and a non-slice start code. [Malladi - Col. 10; Lines 63-67; Col. 11 Lines 3-9; Fig. 1B]

11. As to claim 7, Malladi (modified by Hoogenboom) teaches writing a command to the start code table. [Malladi - Fig. 4; communicates with start code table writing commands is obvious]

12. As to claim 10, Malladi teaches A circuit for decoding video data, [Malladi - Abstract; Col. 1 Lines 24-28; Col. 2 Lines 61-63; Fig. 4] said circuit comprising: a start code table for storing start codes, the start code table comprising a plurality of data words; and a video transport processor [Malladi - Fig. 4 (417)] for writing a plurality of start codes [Malladi - Col.

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15 Lines 34-39, 45-46, 54-56] to a particular data word in the start code table. [Hoogenboom – Col. 2 Line 13; Fig. 4; Col. 15 Lines 34-39, 54-56]

13. As to claim 11, Malladi (modified by Hoogenboom) teaches the plurality of start codes comprises a slice start code and a non-slice start code. [Malladi – Col. 10; Lines 63-67; Col. 11 Lines 3-9; Fig. 1B]

14. As to claim 12, Malladi (modified by Hoogenboom) teaches the video transport processor [Malladi – Fig. 4 (417)] writes presentation time information to the start code table.

As to claim 13, Malladi (modified by Hoogenboom) teaches the presentation time information comprises a presentation time stamp. [Malladi – Col. 15 Lines 34-39, 54-56; Hoogenboom - Col. 6 Lines 18-21]

15. As to claim 14, Malladi (modified by Hoogenboom) teaches the video transport processor writes decoding time information to the start code table. [Malladi – Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 34-39, 45-46, 54-56; Hoogenboom – Col. 5 Lines 40-41; Col. 6 Line 21]

16. As to claim 15, Malladi (modified by Hoogenboom) teaches the decoding time information comprises a decoding time stamp. [Malladi – Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 34-39, 45-46, 54-56; Hoogenboom – Col. 5 Lines 40-41; Col. 6 Line 21]

17. As to claim 19, see rejection of claim 1, except this is a claim to an article of manufacture with the same limitations as claim 1.

18. As to claim 20, see rejection of claim 2, except this is a claim to an article of manufacture with the same limitations as claim 2.

19. As to claim 21, see rejection of claim 3, except this is a claim to an article of manufacture with the same limitations as claim 3.

20. As to claim 22, see rejection of claim 4, except this is a claim to an article of manufacture with the same limitations as claim 4.

21. As to claim 24, see rejection of claim 6, except this is a claim to an article of manufacture with the same limitations as claim 6.

22. As to claim 25, see rejection of claim 7, except this is a claim to an article of manufacture with the same limitations as claim 7.

23. Claims 8-9, 16-18, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malladi et al. (Malladi) US 5,815,206 in view of Hoogenboom US 5,566,089 further in view of Forecast et al. (Forecast) US 7,096,481 B1.

24. As to claim 8, Malladi (modified by Hoogenboom) teaches the limitations of claim 7, writing a to the start code table. [Malladi – Fig. 4; Col. 4 Lines 25-29; Col. 15 Lines 34-39, 45-46, 54-56]

Malladi (modified by Hoogenboom) does not specifically teach a reference clock offset.

Forecast teaches a reference clock offset. [Fig. 40; Col. 20 Lines 7-9, 23-26]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings Forecast with the decoding device of Malladi modified by Hoogenboom, allowing for correction in timing through the use of the clock offset.

25. As to claim 9, Malladi (modified by Hoogenboom and Forecast) teaches the command Malladi - Fig. 4; communicates with start code table writing commands is obvious] and the

reference clock offset [Forecast - Fig. 40; Col. 20 Lines 7-9, 23-26] are written to another particular one of the plurality of data words. [Hoogenboom – Col. 2 Line 13; Fig. 4; Col. 15 Lines 34-39, 54-56]

26. As to claim 16, see rejection of claim 8, except this is a claim to a circuit with the same limitations as claim 8.

27. As to claim 17, see rejection of claim 7, except this is a claim to a circuit with the same limitations as claim 7.

28. As to claim 18, see rejection of claim 9, except this is a claim to a circuit with the same limitations as claim 9.

29. As to claim 26, see rejection of claim 8, except this is a claim to an article of manufacture with the same limitations as claim 8.

30. As to claim 27, see rejection of claim 9, except this is an article of manufacture to a circuit with the same limitations as claim 9.

Conclusion

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNER HOLDER whose telephone number is (571)270-1549. The examiner can normally be reached on M-Th, M-F 8 am - 3 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANH 04/11/08

/Tung Vo/
Primary Examiner, Art Unit 2621